IN THE CLAIMS

Please amend the following claims which are pending in the present

application:

1. (Currently amended) A method of making a microelectronic assembly,

comprising:

improving wetting and flow characteristics of a no-flow underfill material

by preheating the no-flow underfill material;

assembling a construction including a carrier substrate, a microelectronic

die having an integrated circuit, and the no-flow underfill material between the

carrier substrate and the microelectronic die, the wetting characteristics having

been improved before the construction, including the carrier substrate, the

microelectronic die and the no-flow underfill material, is assembled;

reflowing interconnection elements between the carrier substrate and the

microelectronic die of the construction by heating and subsequently allowing the

interconnection elements to cool; and

curing the no-flow underfill material of the construction by heating the no-

flow underfill material for a period of time sufficient to harden the no-flow

underfill material.

2. (Original) The method of claim 1, wherein the no-flow underfill material is

preheated before coming into contact with either the microelectronic die or the

Examiner: David Nhu

carrier substrate.

(Original) The method of claim 2, wherein the construction is assembled 3.

by dispensing the no-flow underfill material on the carrier substrate and

subsequently locating the microelectronic die adjacent the no-flow underfill

material.

4. (Original) The method of claim 3, further comprising:

holding the microelectronic die with a chuck while the interconnection

elements are being reflowed; and

releasing the chuck from the microelectronic die.

(Original) The method of claim 2, wherein the construction is assembled 5.

by dispensing the no-flow underfill material on the microelectronic die and

subsequently locating the carrier substrate adjacent the no-flow underfill

material.

6. (Original) The method of claim 5, further comprising:

holding the microelectronic die with a chuck while the interconnection

elements are being reflowed; and

releasing the chuck from the microelectronic die.

Examiner: David Nhu

-4-

7. (Original) The method of claim 1, wherein the no-flow underfill material is

preheated at a temperature between 30°C and 120°C.

8. (Original) The method of claim 7, wherein the interconnection elements

are reflowed at a temperature of at least 183°C.

9. (Currently amended) A method of making a microelectronic assembly,

comprising:

dispensing a no-flow underfill material on a microelectronic die having an

integrated circuit;

subsequently locating a carrier substrate adjacent the no-flow underfill

material;

reflowing interconnection elements between the carrier substrate and the

microelectronic die by heating and subsequently allowing the interconnection

elements to cool; and

curing the no-flow underfill material by heating the no-flow underfill

material for a period of time sufficient to harden the no-flow underfill material.

10. (Currently amended) The method of claim 9, further comprising:

preheating the no-flow underfill material before dispensing the no-flow

underfill material on the <u>microelectronic</u> die.

11. (Original) The method of claim 9, further comprising:

preheating the underfill material after the carrier substrate is located

adjacent the no-flow underfill material but before the interconnection elements

are reflowed.

12. (Original) The method of claim 9, further comprising:

holding the microelectronic die with a chuck while the interconnection

elements are being reflowed; and

releasing the chuck from the microelectronic die.

13. (Original) The method of claim 9, wherein the no-flow underfill material is

preheated at a temperature between 30°C and 120°C.

14. (Original) The method of claim 13, wherein the interconnection elements

are reflowed at a temperature of at least 183°C.

15. (Currently amended) A method of making a microelectronic assembly,

comprising:

assembling a construction including a carrier substrate, a microelectronic

die having an integrated circuit, interconnection elements between the carrier

substrate and the microelectronic die, and a no-flow underfill material between

the interconnection elements;

subsequently heating the underfill material to a temperature below a

reflowing temperature of the interconnection elements;

subsequently connecting the microelectronic die with a chuck; and

reflowing the interconnection elements by heating the interconnection

elements while the microelectronic die is held with the chuck.

16. (Original) The method of claim 15, wherein the construction is assembled

by dispensing the no-flow underfill material on the carrier substrate.

17. (Original) The method of claim 15, wherein the no-flow underfill material

is preheated at a temperature between 30°C and 120°C.

18. (Original) The method of claim 17, wherein the interconnection elements

are reflowed at a temperature of at least 183°C.

-7-